**We claim:**

1. A composition comprising a chimeric protein which comprises an MHC molecule and an immunoglobulin chain, wherein the chimeric protein associates to form molecular complexes comprising at least two chimeric proteins per complex, wherein an antigenic peptide is bound to each MHC molecule, wherein each MHC molecule within the molecular complex is bound to an identical antigenic peptide.

2. The composition of claim 1 wherein each MHC molecule in the composition is bound to an identical antigenic peptide.

3. The composition of claim 1 wherein the antigenic peptide is passively bound.

4. The composition of claim 1 wherein the antigenic peptide is actively bound.

5. The composition of claim 1 wherein the antigenic peptide is covalently bound to the MHC molecule.

6. The composition of claim 1 wherein the antigenic peptide is bound to the amino-terminus of β2 microglobulin.

7. The composition of claim 1 wherein the antigenic peptide is bound to the amino-terminus of an MHC class II β chain.

8. The composition of claim 7 wherein the antigenic peptide is bound to the amino-terminus of the MHC class II β chain by means of a peptide tether.

9. The composition of claim 1 wherein the molecular complex comprises two of said chimeric proteins.

10. The composition of claim 1 wherein the molecular complex is conjugated to a toxin.

11. The composition of claim 1 wherein the MHC molecule is an MHC class I molecule.

12. The composition of claim 11 wherein the MHC class 1 molecule is an HLA class I molecule.

13. The composition of claim 12 wherein the MHC molecule is an

HLA-A2 molecule.

14. The composition of claim 1 wherein the antigenic peptide is selected from the group consisting of an HTLV-Tax11-19 peptide, a p17 Gag77-85 peptide, and an influenza virus A M158-66 peptide.

15. A vector encoding a chimeric protein comprising an immunoglobulin heavy chain and an MHC molecule, wherein the immunoglobulin is not IgG-1, wherein the immunoglobulin heavy chain is C-terminal to the MHC molecule.

16. The vector of claim 15 wherein the MHC molecule is an MHC class I molecule.

17. The vector of claim 16 wherein the MHC class I molecule is an HLA class I molecule.

18. The vector of claim 17 wherein the HLA class I molecule is an HLA-A2 molecule.

19. A composition comprising a chimeric protein which comprises an MHC molecule and an Ig chain, wherein the chimeric protein associates to form molecular complexes comprising at least two chimeric proteins per complex, wherein the immunoglobulin chain is not an IgG heavy chain.

20. The composition of claim 19 wherein the chimeric protein is conjugated to a toxin.

21. A composition comprising a cell in which a chimeric protein is bound to the surface of the cell, wherein the chimeric protein comprises an MHC molecule and an immunoglobulin chain; wherein the chimeric protein associates to form molecular complexes comprising at least two chimeric proteins per complex, wherein an antigenic peptide is bound to each MHC molecule, wherein each MHC molecule within the molecular complex is bound to an identical antigenic peptide.

22. The composition of claim 21 wherein the cell is a dendritic cell.

23. The composition of claim 21 wherein a population of said chimeric proteins is bound to the cell, wherein each MHC molecule in the population of said chimeric proteins is bound to an identical antigenic peptide.

24. A method for treating a patient suffering from an allergy, comprising:

administering to the patient at a dose sufficient to suppress a T cell response associated with an allergy of the patient a chimeric protein which comprises an MHC molecule and an immunoglobulin chain; wherein the chimeric protein associates to form molecular complexes comprising at least two chimeric proteins per complex, wherein an antigenic peptide is bound to each MHC molecule, wherein each MHC molecule within the molecular complex is bound to an identical antigenic peptide, and wherein the antigenic peptide is an antigen to which the patient has an allergic response.

25. A method for treating a patient who has received or will receive an organ transplant, comprising:

administering to the patient at a dose sufficient to suppress an immune response to the transplanted organ a chimeric protein which comprises an MHC molecule and an immunoglobulin chain; wherein the chimeric protein associates to form molecular complexes comprising at least two chimeric proteins per complex, wherein an antigenic peptide is bound to each MHC molecule, wherein each MHC molecule within the molecular complex is bound to an identical antigenic peptide, and wherein the antigenic peptide is an alloantigen.

26. A method for treating a patient suffering from an autoimmune disease, comprising:

administering to the patient at a dose sufficient to suppress an immune response associated with the autoimmune disease a chimeric protein which comprises an MHC molecule and an immunoglobulin chain; wherein the chimeric protein associates to form molecular complexes comprising at least two chimeric proteins per complex, wherein an antigenic peptide is bound to each MHC molecule, wherein each MHC molecule within the molecular complex is bound to an identical antigenic peptide, and wherein the antigenic peptide is one to which the patient expresses an autoimmune response.

27. The method of claim 26 wherein the autoimmune disease is HTLV-1 associated myelopathy/tropical spastic paraparesis (HAM/TSP).

28. The method of claim 26 wherein the MHC molecule is an MHC class I molecule.

29. The method of claim 28 wherein the MHC class I molecule is an HLA class I molecule.

30. The method of claim 29 wherein the HLA class I molecule is an HLA-A2 molecule.

31. The method of claim 27 wherein the antigenic peptide is HTLV-1 Tax11-19.

32. A method for treating a patient having a tumor, comprising:

administering to the patient at a dose sufficient to induce or enhance an immune response to the tumor a chimeric protein which comprises an MHC molecule and an immunoglobulin chain; wherein the chimeric protein associates to form molecular complexes comprising at least two chimeric proteins per complex, wherein an antigenic peptide is bound to each MHC molecule, wherein each MHC molecule within the molecular complex is bound to an identical antigenic peptide, and wherein the antigenic peptide is a tumor-associated peptide.

33. A method for treating a patient having an infection caused by an infectious agent, comprising:

administering to the patient at a dose sufficient to induce or enhance an immune response to the infection a chimeric protein which comprises an MHC molecule and an immunoglobulin chain; wherein the chimeric protein associates to form molecular complexes comprising at least two chimeric proteins per complex, wherein an antigenic peptide is bound to each MHC molecule, wherein each MHC molecule within the molecular complex is bound to an identical antigenic peptide, and wherein the antigenic peptide is a peptide of an infectious agent.

34. The method of claim 33 wherein the infection is an HIV infection.

35. The method of claim 34 wherein the antigenic peptide is p17

Gag77-85.

36. The method of claim 33 wherein the MHC molecule is an MHC class I molecule.

37. The method of claim 36 wherein the MHC class I molecule is an HLA class I molecule.

38. The method of claim 37 wherein the HLA class I molecule is an HLA-2 molecule.

39. The method of claim 33 wherein the infection is an influenza infection.

40. The method of claim 39 wherein the antigenic peptide is an influenza virus A M158-66 peptide.

41. A method of labeling antigen-specific T cells, comprising:

contacting a sample which comprises antigen-specific T cells with a chimeric protein; wherein the chimeric protein comprises an MHC molecule and an immunoglobulin chain, wherein the chimeric protein associates to form molecular complexes comprising at least two chimeric proteins per complex, and wherein each MHC molecule within the molecular complex is bound to an identical antigenic peptide, whereby the antigenic peptide specifically binds to the antigen-specific T cells, thereby labeling the cells with the chimeric protein.

42. The method of claim 41 further comprising the step of:

separating the antigen-specific T cells which are bound to the antigenic peptides from cells which are not bound.

43. The method of claim 42 wherein the step of separating is performed using flow cytometry.

44. The method of claim 41 further comprising the step of:

counting the number of antigen-specific T cells which are bound to the antigenic peptides.

45. The method of claim 41 wherein said step of contacting is performed *in vitro*.

46. The method of claim 41 wherein said step of contacting is

performed *in vivo*.

47. The method of claim 41 wherein the MHC molecule is an MHC class I molecule.

48. The method of claim 47 wherein the MHC molecule is an HLA class I molecule.

49. The method of claim 48 wherein the HLA class I molecule is an HLA-A2 molecule.

50. The method of claim 41 wherein the antigenic peptide is selected from the group consisting of an HTLV-1 Tax11-19 peptide, a p17 Gag77-85 peptide, and an influenza virus A M158-66 peptide.

51. The method of claim 41 further comprising the step of:

detecting a marker for activation of the antigen-specific T cells.

52. The method of claim 51 wherein the marker for activation of antigen-specific T cells is a secreted lymphokine.